

Free motion of particles in...

S/057/61/031/002/013/015
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$$\left\{ \begin{aligned} b_1 &= -r_0' z_0', \\ b_2 &= r_0'^2 + r_0'^2, \\ b_3 &= -r_0 z_0' + 2r_0' z_0'' - r_0'' z_0' - \frac{e}{pc} \left[H_0^0 \Phi_0 - (r_0 H_r^0 - r_0' H_0^0) \frac{\partial \Phi_0}{\partial r'} \right], \\ b_4 &= -r_0 r_0' - r_0' r_0'' - \frac{e}{pc} (r_0' H_0^0 - r_0 H_r^0) \frac{\partial \Phi_0}{\partial z}, \\ b_5 &= 2r_0 z_0'' - r_0' z_0' - \frac{e}{pc} \left[\left(-H_r^0 - r_0 \frac{\partial H_r^0}{\partial r} + r_0' \frac{\partial H_0^0}{\partial r} \right) \Phi_0 - \right. \\ &\quad \left. - (r_0 H_r^0 - r_0' H_0^0) \frac{\partial \Phi_0}{\partial r} \right], \\ b_6 &= -\frac{e \Phi_0}{pc} \left(\frac{r_0'}{r_0} \frac{\partial H_r^0}{\partial \theta} - r_0 \frac{\partial H_r^0}{\partial r} \right). \end{aligned} \right. \quad (1, 7)$$

The system of Eqs. (1,4) determines the particle path r_0, z_0 and the system (1,5) the betatron oscillations around this path. In the general case it has a complex "wave form", the equation of which was solved by the

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successive approximation method. The study of the path in the annular synchrocyclotron shows (equation

$$X \approx -\frac{2sR_{s,N}}{N^2} \cos N\theta + \frac{s^2 R_{s,N}^2}{2N^4} \left(n + \frac{5}{2}\right) \cos 2N\theta - s \frac{s^2 R_{s,N}^2}{2N^4} \sin 2N\theta, \\ a_{1,2} \approx \mp \frac{N}{2} \left(\frac{2}{n + \frac{3}{2}}\right)^{1/2} \frac{1}{R_{s,N}}, \quad n > -\frac{3}{2}. \quad (2, 20)$$

that the controlling magnetic field which periodically varies with the azimuth is to increase with the absolute value of the diameter to attain a simultaneous acceleration of particles with the same sign in opposite directions. Relation

$$K \approx N \left(\frac{2}{n + \frac{3}{2}}\right)^{1/2} \left[1 + \frac{n+1}{N} \left(\frac{2}{n + \frac{3}{2}}\right)^{1/2}\right]. \quad (3, 4)$$

is derived for the "utilization" coefficient of the magnetic field. The main characteristics of the betatron oscillations, i.e., the amplitude and frequency Q can be determined from the equations

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$$\begin{aligned}
 A_{k,k} \simeq & -3\delta_{k,0}(1 + \alpha H_{s,k}) - \alpha \left[H_{s,k} + r \frac{\partial H_{s,k}}{\partial r} + \alpha \sum_{m \neq 0} \frac{k-m}{m} H_{r,m} H_{r,k-m} - \right. \\
 & - 2ix \sum_{m \neq 0} \frac{H_{r,m} H_{s,k-m}}{m} \left. \right] + \alpha^2 \left\{ \sum_{m \neq k,0} \frac{1}{m(k-m)} (6H_{s,m} H_{s,k-m} - \right. \\
 & - 2H_{r,m} H_{r,k-m}) + \sum_{m \neq 0} \frac{1}{m^2} \left[H_{s,m} \left(7H_{s,k-m} + 4r \frac{\partial H_{s,k-m}}{\partial r} + r^2 \frac{\partial^2 H_{s,k-m}}{\partial r^2} \right) - \right. \\
 & \left. \left. - H_{r,m} \left(4r \frac{\partial H_{s,k-m}}{\partial z} + r^2 \frac{\partial^2 H_{s,k-m}}{\partial r \partial z} \right) \right] \right\}, \\
 A_{s,k} \simeq & -\alpha \left(r \frac{\partial H_{s,k}}{\partial z} + \alpha \sum_{m \neq 0} \frac{k-m}{m} H_{r,m} H_{s,k-m} + ix \sum_{m \neq 0} \frac{H_{s,m} H_{s,k-m}}{m} \right) - \\
 & - \alpha^2 \left\{ \sum_{m \neq k,0} \frac{2H_{s,m} H_{r,k-m}}{m(k-m)} + \sum_{m \neq 0} \frac{1}{m^2} \left[H_{s,m} \left(2r \frac{\partial H_{s,k-m}}{\partial z} + r^2 \frac{\partial^2 H_{s,k-m}}{\partial r \partial z} \right) - \right. \right. \\
 & \left. \left. - H_{r,m} r^2 \frac{\partial^2 H_{s,k-m}}{\partial z^2} \right] \right\}; \quad (4,10)
 \end{aligned}$$

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and

$$\begin{aligned}
 B_{t,k} \simeq & \alpha \left[2(1 + \delta_{k,0}) H_{r,k} + r \frac{\partial H_{r,k}}{\partial r} - \alpha \sum_{m \neq 0} \frac{k-m}{m} H_{s,m} H_{r,k-m} + \right. \\
 & + 3i\alpha \sum_{m \neq 0} \frac{H_{s,m} H_{t,k-m}}{m} \left. \right] - 2\alpha^2 \left\{ \sum_{m \neq k,0} \frac{H_{s,m} H_{r,k-m}}{m(k-m)} + \sum_{m \neq 0} \frac{1}{2m^2} \left[H_{s,m} \left(6H_{r,k-m} + \right. \right. \right. \\
 & + 2r \frac{\partial H_{r,k-m}}{\partial r} + r^2 \frac{\partial^2 H_{r,k-m}}{\partial r^2} - H_{r,m} \left(2r \frac{\partial H_{s,k-m}}{\partial r} + r^2 \frac{\partial^2 H_{s,k-m}}{\partial r^2} \right) \left. \right] \left. \right\}, \\
 B_{s,k} \simeq & \alpha \left[(1 - \delta_{k,0}) H_{s,k} + r \frac{\partial H_{s,k}}{\partial r} - \alpha \sum_{m \neq 0} \frac{k-m}{m} H_{s,m} H_{s,k-m} \right] + \\
 & + \alpha^2 \left\{ \sum_{m \neq k,0} \frac{H_{s,m} H_{s,k-m}}{m(k-m)} + \sum_{m \neq 0} \frac{1}{m^2} \left[H_{s,m} \left(H_{s,k-m} - 2r \frac{\partial H_{s,k-m}}{\partial r} - \right. \right. \right. \\
 & \left. \left. - r^2 \frac{\partial^2 H_{s,k-m}}{\partial r^2} \right) + H_{r,m} \left(r \frac{\partial H_{s,k-m}}{\partial r} - r^2 \frac{\partial^2 H_{s,k-m}}{\partial r^2} \right) \right] \left. \right\}. \quad (4,11)
 \end{aligned}$$

derived. The betatron oscillations in the annular synchrocyclotron are dealt with for the general and two special cases, i.e., the sector-spiral-annular synchrocyclotron and the sector-radial-annular synchrocyclotron.

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In the former case, the author proves mathematically that for the stability s must be ≥ 5 , hence the number of spirals in the "symmetrical" accelerator must be large: $N \geq 40$ and the design of the magnet thus becomes complicated. For the sector-radial-annular synchrocyclotron $K_{\min} \approx 6$ was derived for the "utilization" coefficient of the magnetic field $K \approx 2(1 + \sqrt{N}) \approx 2.4\sqrt{N}$. This can be especially used to calculate the possible parameters of the symmetrical annular synchrocyclotron. A Table shows the possible parameters of the magnetic field of the sector-radial-annular synchrocyclotron which were calculated from (3,4) and

$$Q_s^2 \approx 2n, \quad Q_y^2 \approx (1 + 2s^2) \frac{\sum_{m \neq 0} R_{s,m} R_{s,-m}}{\sum_{m \neq 0} \frac{R_{s,m} R_{s,-m}}{m^2}} \quad (4, 26)$$

For comparison, the numerical results are given in brackets. The author thanks A. A. Kolomenskiy for assistance and permanent interest in this paper. There are 1 table and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc.

Card 8/9

FATEYEV, A.V.; KAREL'SHTEYN, I.M.

Using polystyrene foam in the production of furniture. Der. prom. 12
no.11:15-16 N '63. (MIRA 17:1)

TEST AND PROPERTIES INDEX		PROCESSING AND PROPERTIES INDEX	
<p>21</p> <p>The relation of the octane numbers of the reformed gasoline to the yield of gasoline, based on the crude oil taken. A. I. Kotonkina and A. V. Fateev. <i>Vostochnaya Neft</i> 1959, No. 4-5, 66-7; <i>Khim. Nefti</i>, Zhur. 1940, No. 6, 100.—The octane nos. of reformed gasolines increase in inverse proportion to their yields from naphthas. The higher the octane no. of naphthas, the higher that of the gasoline obtained. Investigations of the corresponding fractions of Pennsylvania, Michigan, Mexican, Baku and Ishimbay petroleum indicate that the curves of the octane nos. and of the yields of gasolines by reforming various naphthas are parallel. Gasoline with a desired octane no. can be obtained by a suitable selection of the crude oil.</p> <p>W. R. Henn</p>		<p>21</p>	
<p>ASR-31A METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>10000 000000</p>	
<p>10000 000000</p>		<p>10000 000000</p>	

CA 22

PROCESSES AND PROPERTIES INDEX

A rapid method for the determination of mercaptan sul-
fur in gasoline distillates. D. A. Shtroum and A. V.
Fetisov, *Zavodskaya Lab.* 11, 801 (1945).—Dissolve 3.91
g. of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ in 800 ml. of distil. water, add
coned. NH_4OH until a clear dark-blue color is obtained,
and add water to 1 l. One ml. of the soln. corresponds to
0.001 g. of mercaptans (RSH). To 100 ml. of the sample
gasoline in a 250-ml. jar with a ground stopper add from a
buret the CuSO_4 soln. in 5-ml. portions and shake after
adding each 5-ml. portion. When the disappearance of
the dark-blue color begins to slow down, add the CuSO_4
soln. carefully in 1-ml. portions until the blue color per-
sists. The percentage of RSH is given by the expression
 $100 V/d$ (V is the vol. of NH_4OH soln. of CuSO_4 used for
the detn. and d the d. of gasoline). W. R. Henn

ADDITIONAL LITERATURE CLASSIFICATION

REPORT NO.

CLASSIFICATION

DATE

BY

REMARKS

FATEYEV, A. V.

(Manual of examples and problems on the theory of electric drive).
(Moskva), Gosenergoizdat, 1951.

SO: MLRA, November 1952.

Fat'yev, N.V.

BOGORODITSKIY, N.P., professor; VASIL'YEV, D.V., professor; BAYDA, L.I.
dotsent; ODINTSOV, G.V., dotsent; SEMENKOVICH, A.A., dotsent: ~~FAT'YEV,~~
A.V., dotsent; YURGENSON, R.I., dotsent; ARANOVICH, B.I., starshiy
prepodavatel'; GIKTOR, D.S. starshiy преподаvatel'; POVOLOTSKIY, Ya.A.,
prepodavatel'.

Development of automatic control and telemechanics in the fifth
five-year plan. Avtom. i telem. 14 no.2'238-240 Mr-Ap '53.
(MLRA 10:3)

1. Leningradskiy elektrotekhnicheskiy institut im. V.I.Ul'yanova
(Lenina)

(Automatic control) (Remote control)

FRIDMAN, A. V. (Soviet Tech Sci)

dissertation: "Methods of determining parameters of correcting feedbacks for automatized systems." Dr Tech Sci, Institute of Automatics and Telemechanics, Acad Sci USSR, 24 Jun 54. (Izvestiya Moskva, Moscow, 15 Jun 54)

SO: STM 318, 23 Dec 1954

~~FATYEV~~, Aleksandr Vasil'yevich; SEMENOV, V.V., redaktor; ZABRODINA, A. A.,
tekhnicheskii redaktor.

[Principles of the linear theory of automatic control] Osnovy
lineinoy teorii avtomaticheskogo regulirovaniya. Moskva, Gos.
energeticheskoe izd-vo, 1954. 295 p. (MIRA 8:2)
(Automatic control)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510005-3

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From the known values of the qualitative constants and the reserve stability, nomograms are plotted to produce a material,

frequency characteristic and the phase-amplitude characteristic of the corrected system are determined.

If the phase-amplitude characteristic of the uncorrected system is already known, a method of graphical analysis can be applied to the construction of the phase-amplitude characteristic of the correcting arrangement, from which its type and parameters can be determined.

Tables are given of typical links and their frequency characteristics.

1. 7. V.
KULEBAKIN, V.S.; ALEKSEYEV, A.Ye.; LARIONOV, A.N.; BOGORODITSKIY, N.P.;
CHILIKIN, M.G.; VASIL'YEV, D.V.; ODINTSOV, G.V.; PETROV, I.I.;
FATEYEV, A.V.; GOLOVAN, A.T.; MOROZOV, D.P.; BASHARIN, A.V.

S.A.Rinkevich. Elektrichestvo no.9:85 S'55. (MLRA 8:11)
(Rinkevich, Sergei Aleksandrovich, 1886-1955)

FATEYEV, A.V.

PHASE I BOOK EXPLOITATION 796

Verkholat, Mikhail Yefimovich and Fateyev, Aleksandr Vasil'yevich

Analiz raboty i raschet elementov elektricheskogo privoda (Analysis of Operation and Design of Elements of Electric Drives) Moscow, Mashgiz, 1957. 105 p.
8,500 copies printed.

Reviewers: Zussman, V.G., Candidate of Technical Sciences, and Naydis, V.A., Engineer; Ed.: Sabinin, Yu.A., Candidate of Technical Sciences; Ed. of Publishing House: Vasil'yeva, V.P.; Tech. Ed.: Sokolova, L.V.; Chief Ed. (Leningrad Division, Mashgiz): Bol'shakov, S.A., Engineer.

PURPOSE: The monograph is intended for engineering and technical personnel engaged in machine-tool building and, chiefly, in the design of electric drives for metal-cutting machines. It can also be used by students in the machine-tool building departments of vtuzes.

COVERAGE: The monograph presents an analysis of the operation of an automatic control system for the feed drive of a heavy horizontal boring machine. The

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Analysis of Operation and Design (Cont.)

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effect of various compensating devices on the dynamic properties of the system is shown. Methods of designing electric drives with wide a speed range of the d-c prime mover are shown. The book explains the operation of compensating devices and gives methods for their selection. For purposes of illustration, an electric drive with a wide speed range for a type 265 heavy universal boring machine manufactured by the Stankostroitel'nyy zavod im. Sverdlova (Machine-tool Building Plant imeni Sverdlov) in Leningrad is discussed. The authors thank the chief designer of the Machine-tool Building Plant imeni Sverdlov, M.Ye. El'yasberg, for his help in preparing the book. There are 21 Soviet references, including 1 translation.

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FILED, H.V.

NAME X BOOK REFERENCE

X(7)

Glennan geophysical observatory

Vapor meteorological instruments (Problems in the Development of Meteorological Instruments) Leningrad, Gidrometizdat, 1958. 46 p. (Series: The Study, 1958. 1,350 copies printed.

Additional Sponsoring Agency: GSI. Glennan geophysical observatory library.

Dr. (this year); H.A. Starnes, Candidate of Physical and Mathematical Sciences; Dr. (this year); H.A. Starnes, Candidate of Physical and Mathematical Sciences; Dr. (this year); H.A. Starnes, Candidate of Physical and Mathematical Sciences.

Summary: This collection of articles is intended for specialists in the meteorological instrument-making industry as well as for personnel engaged in observing and measuring meteorological phenomena.

Contents: This collection of articles describes various instruments used in observing and measuring meteorological phenomena. Individual articles describe instruments used to measure air temperature and humidity and the instruments used to measure wind speed and direction. It also describes the instruments used in cloud observations. One article describes the instruments used in measuring the vertical distribution of atmospheric pressure. There are 24 references.

Index, B.P. A New Automatic Condensation Hygrometer	3
Alexander, I.D. Selection of the Optimum Interval for Determining Average Wind Velocity	20
Ribnikov, V.Ya. Methods for Determining the Aggregate State of a Fog	25
Alexander, B.E. A Field Indicator for Measuring the Relative Concentration of Radiative Inertia in the Air	27
Shubert, I.P. Device for Actinometric Measurements	36
Alexander, V.A. Instrument for Temperature Measurements	40
Prokhorov, V.A. Instrument for Registering High Velocities and the Direction of Wind	43

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FATEYEV, A. V.

8(2)

PHASE I BOOK EXPLOITATION

SOV/2030

Vasil'yev, Dmitriy Vasil'yevich, Boris Afanas'yevich Mitrofanov, Grigoriy L'vovich Rabkin, Georgiy Nikanorovich Samokhvalov, Aleksandr Aleksandrovich Semenkovich, Aleksandr Vasil'yevich Fateyev, and Nikolay Ivankovich Chicherin

Raschet sledyashchego privoda (Servodrive Design) Leningrad, Sudpromgiz, 1958.
370 p. 8,000 copies printed. Errata slip inserted.

Resp. Ed.: S. Ya. Berezin; Ed.: Ye. N. Shaurak; Tech. Ed.: P. S. Franklin.

PURPOSE: This book is intended for scientists, engineers, and students of vases.

COVERAGE: This book discusses the problems of designing electromechanical servodrives and gives examples of design from the point of view of the overall system and of the individual basic elements. The design of servodrive amplifiers, the selection and design of error-sensing devices, and the experimental determination of the transfer functions of the discrete links of a servodrive are given considerable attention in the book. Materials on the design of electromechanical servodrives are systematized and the design of servodrives with electronic and magnetic amplifiers and of servodrives with rotating amplifiers is discussed. These designs reflect the practical experiences of the authors in the development of servosystems. The authors

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Servodrive Design (Cont.)

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thank I. A. Petrusenko, I. S. Rayner, N. M. Konovalova, L. A. Agarkova, and Yu. A. Yerenyev for their aid in preparing the book. There are 51 references: 47 Soviet, 1 German, and 3 English.

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FATEYEV, A.V.
BOGORODITSKIY, N.P.; YERMOLIN, N.P.; *FATEYEV, A.V.*; VASIL'YEV, D.V.; ODINTSOV,
G.V.; GIKTOR, D.S.; APIAKSIN, D.K.

Professor V.A. Timofeev. Elektrichestvo no.2:96 P '58. (MIRA 11:2)
(Timofeev, Vladimir Andreevich, 1897-)

SOV/146-58-4-11/22

AUTHORS: Fateyev, A.V., Doctor of Technical Sciences, Professor, Vavilov, A.A., Candidate of Technical Sciences, Docent, Granstrem, M.P., and Kotchenko, F.F., Engineers

TITLE: An Automatic Quick-Response Compensator Developed on the Basis of the EPP-09 Instrument

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Priborostroyeniye, 1958, Nr 4, pp 60-68 (USSR)

ABSTRACT: The automatic, quick-response compensator EPP-09, produced by the Soviet industry, does not meet the quick-response requirements for laboratory and production purposes, since the indicator travels over the dial within 1 second, while in some cases a travelling speed of 0.2 - 0.3 seconds is required. The solution of this problem presents great difficulties, since re-adjustments must be kept at a minimum and must not exceed 0.2 - 0.3% of the dial length. The minimum zone of non-sensitivity must not exceed 0.1 - 0.2% of the dial length. The experience of a number of foreign enterprises proves the possibility of creating a device which

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An Automatic Quick-Response Compensator Developed on the Basis of the EPP-09 Instrument

provides the required quick-response. In this paper, the authors describe the servo mechanism for the quick-response automatic compensator EPP-09 with a measuring range of 0 - 10 millivolts and 0 - 500 microvolts, and present also some results of the experimental investigation of the model of the automatic, quick-response compensator. It has an indicator travelling time of 0.25 - 0.3 seconds with a maximum readjustment value of 0.2 - 0.3% of the dial length. The improvements were developed at the Kafedra avtomatiki i telemechaniki Leningradskogo elektrotekhnicheskogo instituta imeni V.I. Ul'yanova (Lenina) (Chair of Automation and Remote Controls of the Leningrad Electrical Engineering Institute imeni V.I. Ul'yanov (Lenin)). Figure 1 shows the principal circuits of the servo mechanism. The motor RD-09 which was originally used, was replaced by a DARM-4/2 motor, because the ASM-100 motor did not provide the required quick-response

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An Automatic Quick-Response Compensator Developed on the Basis of
the EPP-09 Instrument

(only 0.5 seconds). The control winding of the DARM-4/2 motor is fed from the push-pull output stage of an electronic amplifier with 6P3S tubes. Figure 3 shows the circuit diagram of the electronic amplifier of the automatic quick-response compensator for the measuring range of 0 - 10 millivolts, while the amplifier of the range of 0 - 500 microvolts is shown in Figure 4. Each amplifier is built with two 6N2P, one 6N1P and two 6P3S tubes. Figure 5 shows a photograph of the electronic amplifier. Figures 6, 7, 8, 9 show oscillograms and diagrams of the functioning of the servo mechanism. The zone of non-sensitivity is 0.1 - 0.2% of the dial length. The authors recommend the servo mechanism also for other automatic, quick-response compensators produced by the Soviet industry. There are 1 photograph, 3 circuit diagrams, 1 graph, 4 oscillograms, 2 diagrams and 3 references, 2 of which are Soviet and 1 English.

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SOV/146-58-4-11/22

An Automatic Quick-Response Compensator Developed on the Basis of
the EPP-09 Instrument

ASSOCIATION: Leningradskiy elektrotekhnicheskij institut imeni V.
I. Ul'yanova (Lenina) (Leningrad Electrical Engineer-
ing Institute imeni V.I. Ul'yanov (Lenin))

SUBMITTED: April 13, 1958

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AUTHORS: Ivanov, V. I., Professor, Doctor of Technical Sciences, Vasil'yev, D. V., Professor, Doctor of Technical Sciences, Fateyev, A. V., Professor, Doctor of Technical Sciences, Odintsov, G. V., Docent, Candidate of Technical Sciences SOV/105-58-9-34/34

TITLE: Bibliography (Bibliografiya) K.V.Bulgakov: Power Supply for Industry (K.V.Bulgakov: Energosnabzheniye promyshlennykh predpriyatiy)

PERIODICAL: Elektrichestvo, 1958, Nr 9, pp 96 - 96 (USSR)

ABSTRACT: This is a review of a book published in 1957 by "Gosenergo-izdat", 343 pp., 11,85 Roubles. Power supply for industry is correctly described as a many-sided problem which must be solved as a whole. The book is intended for the engineer concerned with the design of power plants for industry and with their operation, but may also serve as a textbook for students working in this field. It will be of particular value since at present there is no other book on this subject. The book is on a high scientific and theoretical level. The subject dealt

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Bibliography. K.V.Bulgakov: Power Supply for Industry SOV/105-58-9-34/34

with is scientifically arranged, it complies with the present state of power engineering, and is simply and lucidly written. Some minor imperfections, as the too small number of numerical examples and reference data, etc., could be easily removed with the next edition.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im.V.I. Ul'yanova (Lenina)(Leningrad, Electrical Engineering Institute im.V.I.Ul'yanov (Lenin))

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USCOM-DC-60.781

FATEYEV, A. V.
P. 2

SOV/144-58-9-18/18

AUTHOR: Gikis, A. F., Candidate of Technical Sciences, Docent
TITLE: Inter-University Scientific Conference on Electric
Measuring Instruments and Technical Means of Automation
(Mezhvuzovskaya nauchnaya konferentsiya po
elektroizmeritel'nyy priboram i tekhnicheskim sredstvam
avtomatiki)
PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika,
1958, Nr 9, pp 130-135 (USSR)
ABSTRACT: The conference was held at the Leningradskiy
elektrotekhnicheskii institut imeni V. I. Ul'yanova
(Lenina) (Leningrad Electro-technical Institute imeni
V. I. Ul'yanov (Lenin)) on November 11-15, 1958. The
representatives of eleven higher teaching establishments
and three research institutes participated and a large
number of specialists of various industrial undertakings
were present.
Professor A. M. Rozenblatt (Institute of Automation and
Telemechanics, Ac.Sc. USSR) presented an exhaustive
review paper on "Application of magnetic amplifiers in
automation and metering". Magnetic amplifiers permit
Card 1/13 execution of five basic logical operations and, therefore,

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they can be applied in discrete operation automation
equipment.

Professor A. V. Fateyev (Leningrad Electro-Technical
Institute imeni V. I. Ul'yanov (Lenin)) read the paper
"Present state and prospects in the development of
the theory and technique of automatic control",
reviewing present trends in the theory of automatic
regulation, development of the theory of linear systems
of automatic control and giving an outline of the present
state of the theory of non-linear systems, systems of
optimizing control, self-setting systems and impulse
control systems.

Docent F. A. Stupel' (Khar'kov Polytechnical Institute)
in his paper "Present-day designs of an electro-
magnetic automation mechanisms" outlined the character-
istics of individual types of electro-magnetic mechanisms
and the main trends in the design of electro-magnetic
contactors, relays, polarized relays, fast electro-
magnets, electro-magnetic couplings and special electro-

Card 2/13 magnetic mechanisms for programme control.

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Professor N. G. Boldyrev (Leningrad Electro-Technical Institute) in his paper "Stability of discrete automatic systems with back coupling" has shown that the final automatic device can always be synthesized from elements possessing only two states, 0 and 1, which are linked into a finite number of elementary circuits.

Docent A. M. Melik-Shakhnazarov (Azerbaydzhan Industrial Institute imeni M. Azizbekov) in his paper "Problems of automation of a.c. compensation mechanisms" gave a systematic review of the problem and quoted practical examples of auto-compensation equipment used in various branches of engineering.

Docent A. S. Rozenkrants (Ivanovo Power Institute imeni V. I. Lenin) in his paper "Automatic a.c. bridges and compensators" emphasized the acute demand for automatic instruments for comparing alternating currents. The fields of application of such instruments could be considerably extended if they would be designed for

Card 3/13 operating at a wider frequency range. He considered it

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advisable to base the automation of such comparison instruments on using a phase sensitive indicator and has described a bridge of this type which was built at the Ivanovc Power Institute.

Yu. A. Skripnik (Kiyev Polytechnical Institute) reported on a phase sensitive switch indicator of semi-equilibrium of a.c. bridges.

Professor L. F. Kulikovskiy (Kuybyshev Industrial Institute imeni V. V. Kuybyshev) presented a paper on "Some new types of a.c. compensators".

Assistant Ye. I. Tenyakov (Novocherkassk Polytechnical Institute imeni S. Ordzhonikidze) presented the paper "Certain problems of designing automatic d.c. potentiometers of high accuracy with numerical reading off".

Aspirant D. I. Malov (Novocherkassk Polytechnical Institute) presented the paper "High accuracy automatic d.c. bridge with numerical reading off".

Assistant V. A. Ivantsov (Novocherkassk Polytechnical Institute) presented the paper "Measuring element

Card 4/13 for accurate automatic comparison metering instruments

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with numerical reading off"; the sensitivity threshold of such instruments must be of the order of $10 \mu\text{V}$ and $30 \mu\text{V}$ in a bridge-circuit in the case of an input resistance of at least $100 \text{ k}\Omega$. The response time should be of the order of 5 msec . The design of the instrument described by him is based on an a.c. amplifier, whereby the d.c. voltage to be measured is transformed into a.c. by a vibrator with a noise level of the order of $1 \mu\text{V}$. The instrument is phase sensitive and stability against overloads was achieved by using a 2-way diode limiter.

Docent B. M. Smolov (Leningrad Electro-Technical Institute) read the paper "Non-linear electronic voltage transformers with a numerical output", in which he considered two methods of transforming voltages into a numerical code.

V. P. Skuridin (Ural Polytechnical Institute imeni S. M. Kirov) presented the paper "New counters based on polarized relays". These do not suffer from the

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disadvantage of existing counters, namely, that the results are lost if the current supply is accidentally interrupted.

Professor A. V. Fremke and Docent Ye. M. Dushin (Leningrad Electro-technical Institute) presented the paper "Metering transducers for automatic instruments with discrete types of recording".

Candidate of Technical Sciences V. B. Ushakov and P. N. Kopay-Gora (Scientific Research Institute for Computers) presented the paper "Computing equipment for automatic centralized control of production parameters".

Candidate of Technical Sciences V. B. Ushakov presented the paper "Certain trends in the development of analogue computers and of computing devices intended for use in industry".

Candidate of Technical Sciences B. V. Shamray (Leningrad Electrotechnical Institute) presented the paper "Low inertia transducer of thermo e.m.f. into a d.c. voltage", operating with magnetic elements of an input resistance

Card 6/13 of 100 Ohm, a signal of 0.001 V and an output voltage

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of 40 V with a resistance of 4000 Ohm.

Docent G. A. Alizade (Azerbaijani Industrial Institute
Imeni M. Azizbekov) presented the paper "New d.c. metering
transducers with a high input resistance" (phase
sensitive transducer in d.c. compensators and
particularly its application in the chemical industry).

Docent P. V. Novitskiy (Leningrad Electrotechnical
Institute) presented the paper "Apparatus for measuring
vibration parameters", described a piezo-electric
accelerometer with a range of 10 to 10 000 c.p.s., a
sensitivity of 3 to 7 mV/m/sec² with an error of up to
2.5%.

Candidate of Technical Sciences D. A. Borodayev
(Ural Polytechnical Institute) presented the paper
"Instruments for ultra-sonic monitoring of the level
and the pressure of liquids" which was one of a series
of papers on measuring non-electrical magnitudes by
electric methods.

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Corresponding Member of the Ac.Sc. USSR Professor
K. B. Karandeyev presented the paper "Application of
semi-conductors for metering purposes".

Assistant G. N. Novopashenny presented the paper
"Metering amplifiers with semi-conductor triodes".

Docent Ya. V. Novosel'tsev, Assistants N. A. Smirnov,
Ye. Ye. Afanas'yev and Ye. P. Ugryumov (Leningrad
Electrotechnical Institute) presented the paper
"Semi-conductor precision instrument for measuring
the frequency by the method of counting impulses".
The described instrument enables measuring the
frequency of harmonic oscillations which occur once
only; the frequency of the input oscillations is
amplified 24 times and the error in measurement does
not exceed 2×10^{-5} .

A number of papers were presented on measuring and
producing instruments based on recently discovered
physical phenomena.

Professor Ye. G. Shramkov and Junior Scientific Worker
S. A. Spektor (Leningrad Polytechnical Institute

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imeni M. I. Kalinin) presented the paper "Measurement

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of large d.c. currents by the method of nuclear magnetic resonance", which permits measuring with an error below 0.1%; the built experimental instrument was suitable for measuring currents up to 35 000 A with an error not exceeding 0.05%.

Professor N. N. Shumilovskiy (Moscow Lenin Order Power Institute) presented the paper "Basic trends of development of radio-active methods of automatic control of production processes"; he dealt with sources of metering errors and methods of improving the accuracy.

Professor Ya. Z. Tsypkin (Institute of Automatics and Telemechanics, Ac.Sc. USSR) presented the paper "On certain features and potentialities of impulse automatic systems". He dealt particularly with "compensation" delay in impulse automatic systems, impulse extremal and self-setting systems and basic trends in the development of impulse circuits.

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Assistant M. M. Fetisov (Leningrad Polytechnical Institute) presented a paper on the "Basic problems of the theory of automatic electric metering instruments with reverse transformation for measuring non-electrical magnitudes". The method is based fundamentally in compensating the measured non-electrical magnitude with a similar magnitude produced by means of a transducer.

Professor R. R. Kharchenko (Moscow Lenin Order Power Institute) presented the paper "Determination of the dynamic errors of a magneto-electric oscillograph by means of analogues".

N. F. Suvid (Kiyev Polytechnical Institute) presented the paper "Measurements using magnetic bridges".

In addition to this, three further papers were read on magnetic measurements.

Candidate of Technical Sciences P. G. Nikitin and Senior Lecturer D. A. Bezukladochnikov (Ural Polytechnical Institute) read the paper "Measuring the potential of a magnetic field by means of bismuth resistance and Hall

Card 10/13 e.m.f. pick-ups"; he described a new method of producing

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bismuth spirals by electrolytic deposition of bismuth inside grooves of a base made of insulation material. Senior Lecturer V. A. Ferents (Kazan' Aviation Institute) presented the paper "High sensitivity magnetic gas analysers for oxygen"; the increased sensitivity was achieved by separating the heat sensitive element from the heating element.

Docent P. P. Ornatskiy (Kiyev Polytechnical Institute) presented the paper "Measurement of electrical magnitudes at infra-low frequencies by electric indicating instruments of various systems"; this is of interest since there is a demand for instruments operating at frequencies of 1.5 to 0.5 c.p.s.

Docent R. I. Yurgenson (Leningrad Electrotechnical Institute) presented the paper "Methods of ensuring stability against interference in discrete selection systems" in which he dealt with the principles of ensuring active and passive stability against interference in the transmission of

Card 111³ codes used for transmitting discrete data.

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Docent Ya. V. Novosel'tsev (Leningrad Electrotechnical Institute) presented the paper "Averaging, differentiation and smoothing of time functions reproduced by electric signals".

B. S. Ryabyshkin and V. P. Filippov (Siberian Physico-Technical Scientific Research Institute) presented the paper "Electronic analogue correlator"; this was developed at the Tomsk Ionospheric Station for calculating the correlation functions in studying the winds in the ionosphere.

Docent L. I. Stolov (Kazan' Aviation Institute) presented the paper "Certain characteristics of asynchronous micro-motors" (see pp 38-44 of this issue) in which he considers motors with symmetrical windings. The mechanical and the speed characteristics of such motors are investigated on the basis of equations of a 4-pole.

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At the closing session the results were summarized of this conference and resolutions were passed. In particular it was decided to publish the transactions

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of this conference.

ASSOCIATION: Novocherkasskiy politekhnicheskiy institut
(Novocherkassk Polytechnical Institute)

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USCOMM-DC-60,873

FATEYEV, A.V.

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PHASE I BOOK EXPLOITATION

SOV/1953

Anisimov, Vladimir Ivanovich, Aleksandr Aleksandrovich Vavilov, and
Aleksandr Vasil'yevich Fateyev

Sbornik primerov i zadach po lineynoy teorii avtomaticheskogo
regulirovaniya. (Collection of Examples and Problems on Linear
Theory of Automatic Control) Moscow, Gosenergoizdat, 1959.
254 p. 10,000 copie printed.

Ed. (Title page): A.V. Fateyev, Doctor of Technical Sciences, Pro-
fessor; Ed. (Inside book): V.G. Kepperman; Tech. Ed.: Ye.M. Soboleva.

PURPOSE: This collection of examples and problems may be used by
students of higher technical schools and by engineering and tech-
nical personnel engaged in the design and study of automatic
control systems. This book is intended to help the reader to acquire
experience in applying linear automatic control theory to the solu-
tion of practical problems. The book may be used by students
taking the course in automatic control offered by the Leningradskiy
elektrotekhnicheskii institut (Leningrad Electrical Engineering
Institute imeni V.I. Ul'yanov).

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Collection of Examples (Cont.)

SOV/1953

COVERAGE: Particular attention is given to problems in automatic control of voltages, currents, power, position, speed, etc. Problems of obtaining equations and transfer functions of elements and systems of automatic control are also discussed. The authors thank A.A. Voronov, Doctor of Technical Sciences, and Docent V.G. Kepperman, Candidate of Technical Sciences, for reviewing the manuscript. There are 8 Soviet references (including two translations).

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JJP/dfh
8-10-59

VASIL'YEV, Dmitriy Vasil'yevich; CHUICH, Voislav Georgiyevich;
~~PATEYEV, A.V.~~, prof., doktor tekhn.nauk, retsenzent; SABININ,
Yu.A., dotsent, kand.tekhn.nauk, red.; DUDUSOVA, G.A., red.
izd-va; SIMONOVSKIY, N.Z., red.izd-va; NIKOLAYEVA, I.D.,
tekhn.red.

[Calculation of automatic control systems; problems and examples]
Raschet sistem avtomaticheskogo upravleniya; zadachi i primery.
Moskva, Gos. nauchno-tekhn.izd-vo mashinostr.lit-ry, 1959. 390 p.
(MIRA 12:10)

(Electronic control)

(Servomechanisms)

FATEYEV, A.V., doktor tekhn. nauk, prof.

Present status and future development of the theory and technological equipment of automatic control. Izv. vys. ucheb. zav.; prib. no.2:6-16 '59. (MIRA 13:2)

1. Leningradskiy elektrotekhnicheskiy institut im. V.I. Ul'yanova (Lenina)
Rekomendovana kafedroy avtomatiki i telemekhaniki.
(Automatic control)

FATEYEV, Aleksandr Vasil'yevich, doktor tekhn.nauk, prof.; OLEYNIKOV, Viktor Alekseyevich, kand.tekhn.nauk, dotsent; ZOTOV, Nikolay Sergeyevich, assistant; POLYAKOV, Yuriy Andreyevich, inzh.

System for the stabilization and regulation of the speed of a d.c. motor using a tachometer generator. Izv. vys. ucheb. zav.; elektromekh. 3 no.12:58-64 '60. (MIRA 14:5)

1. Zaveduyushchiy kafedroy avtomatiki i telemekhaniki Leningradskogo elektrotekhnicheskogo instituta (for Fateyev). 2. Leningradskiy elektrotekhnicheskii institut (for Oleynikov). 3. Kafedra avtomatiki i telemekhaniki Leningradskogo elektrotekhnicheskogo instituta (for Zotov, Polyakov).

(Electric motors, Direct current)

RAZYGRAYEV, Arkadiy Mikhaylovich; DVORIN, Zinoviy Abramovich; GOL'TSIKER, David Girsheovich; BAKHAREV, Sergey Aleksandrovich; FATEYEV, A.V., doktor tekhn. nauk, retsenzent; VOROSHILOV, M.S., kand. tekhn.nauk, red.; BORODULINA, I.A., red. izd-va; SHCHETININA, L.V., tekhn.red.

[Design and assembly of the electrical equipment of metal-cutting machines] Proektirovaniye i montazh elektrooborudovaniya metallorazhughehikh stankov. Izd. 2., dop. i perer. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 303 p.

(MIRA 14:6)

(Cutting machines--Electric equipment)

PHASE I BOOK EXPLOITATION

SOV/5533

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Akademiya nauk SSSR. Institut elektromekhaniki.

Spetsial'nyye voprosy avtomatizirovannogo elektricheskogo privoda (Special Problems of the Automatic Electric Drive) Moscow, Izd-vo AN SSSR, 1961. 248 p. Errata slip inserted. 6,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut elektromekhaniki.

Eds. (Title page): D. A. Zavalishin, Corresponding Member, Academy of Sciences USSR, and V. V. Rudakov, Candidate of Technical Sciences; Ed. of Publishing House: N. V. Travin; Tech. Ed.: R. A. Arons.

PURPOSE: This book is intended for technical personnel engaged in designing or operating regulated and automated electric drives for machines and mechanisms. It may also be useful to students in advanced courses working on term and degree projects.

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Special Problems of (Cont.)

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COVERAGE: The book discusses the principles of operation and the methods of computation of regulated drives with a-c and d-c motors. Special attention is paid to problems related to the frequency method of induction motor control, which the authors consider the most promising. Recommendations regarding the use of a-c commutator motors and induction motors with special winding and improved starting characteristics are made. A considerable part of the book is devoted to problems of design and calculation of the control circuits for automated d-c drives, and to methods of investigating dynamic characteristics of d-c drive systems by means of electronic and electrodynamic models. Recent developments in regulated d-c drives and modern methods of analyzing and synthesizing automated d-c systems, based on investigations carried out by the Institut elektromekhaniki AN SSSR (Institute of Electromechanics AS USSR), are discussed in detail. The book was written by the following persons: A. A. Dartau (Chs. II and III), D. A. Zavalishin (Introduction, sections 1, 4, 5, and 6 of Ch. I, and Ch. II); S. V. Korotkov (Ch. VI, sec. 3);

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Special Problems of (Cont.)

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I. I. Laptev (sections 4 and 5 of Ch. V); O. V. Popov (Ch. IV; sections 2, 4, and 5 of Ch. V, and sec. 3 of Ch. VI,); V. A. Prozorov (sections 1, 2, and 3 of Ch. I.); V. V. Rudakov (Introduction, sec. 1 of Ch. V, sections 1 and 4 of Ch. VI); V. V. Semenov (sec. 3 of Ch. V); Ye. M. Smirnov (sec. 2 of Ch. VI); E. F. Stepura (sec. 3 of Ch. V); A. V. Fateyev (Introduction). There are 69 references: 59 Soviet, 7 German, 2 English, and 1 French.

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SHMYREV, Aleksandr Nestorovich; MORENSHIL'DT, Vera Aleksandrovna; IL'INA, Sof'ya Glebovna; FATEYEV, A.V., doktor tekhn. nauk, prof., retsenzent; KHOLODILIN, A.M., kand. tekhn. nauk, retsenzent; LEVITIN, S.G., inzh., retsenzent; GERASIMOV, A.V., kand. tekhn. nauk, nauch. red.; CHERTKOV, R.I., kand. fiz.-mat. nauk, nauch. red.; KAZAROV, Yu.S., red.; ERASTOVA, N.V., tekhn. red.

[Ship stabilizers] Uspokoiteli kachki sudov. Leningrad, Gos. soiuzae
izd-vo sudostroit. promyshl., 1961. 515 p. (MIRA 14:12)
(Stability of ships)

GANDIN, L.S.; FATEYEV, A.V.

Analyzing the accuracy of various interpolation methods. Trudy
GGO no.121:19-36 '61. (MIRA 15:5)
(Meteorological stations) (Interpolation)

CHERNORUTSKIY, G.S.; FATEYEV, A.V., prof., doktor tekhn. nauk,
retsensent; PECHERINA, I.N., kand. tekhn. nauk, retsensent;
DUGINA, N.A., tekhn. red.

[Electromechanical automatic control systems: Structure of
automatic control systems. Transfer characteristics of electro-
mechanical elements. Calculation of the control error] Elektro-
mekhanicheskie sistemy avtomaticheskogo regulirovaniia: Struktura
CAP. Peredatochnye svoistva elektromekhanicheskikh elementov.
Raschet oshibki regulirovaniia. Moskva, Mashgiz, 1962. 126 p.
(MIRA 16:3)

(Automatic control)

ANTOMONOV, Yuriy Gur'yevich; SAZONOV, A.Ye., dotsent, retsenzent;
FATEYEV, A.V., prof., retsenzent; OLEYNIKOV, V.A., nauchnyy red.;
NIKITINA, M.I., red.; FRUMKIN, P.S., tekhn. red.

[Automatic control systems using electronic calculating machines;
synthesis of systems optimum in high-speed operation] Avtomaticheskoe upravlenie s primeneniem vychislitel'nykh mashin; sintez sistem, optimal'nykh po b strodeistviu. Leningrad, Sudpromgiz, 1962. 339 p. (MIRA 15:5)

(Automatic control)

OLEYNIKOV, Viktor Alekseyevich; ZOTOV, Nikolay Sergeyevich; FATEYEV,
A.V., doktor tekhn. nauk, prof., retsenzent; KOTCHENKO, P.F.,
inzh., nauchnyy red.; BRUSKIN, D.M., ved. red.; SAFRONOVA,
I.M., tekhn. red.

[Automatic control of technological processes in the
petroleum and petrochemical industries] Avtomaticheskoe regu-
lirovanie tekhnologicheskikh protsessov v neftianoi i nefte-
khimicheskoi promyshlennosti. Leningrad, Gostoptekhizdat,
1962. 321 p. (MIRA 15:11)

(Automatic control)
(Petroleum industry—Equipment and supplies)

IVASHCHENKO, N.N.; FATEYEV, A.V., doktor tekhn. nauk, prof.,
retsenzent; YELISEYEV, M.S., inzh., red.; MODEL', V.I.,
tekhn. red.

[Automatic control; theory and elements of control systems]
Avtomaticheskoe regulirovanie; teoriia i elementy sistem.
2., ispr. i dop. izd. Moskva, Mashgiz, 1962. 628 p.
(MIRA 15:11)

(Automatic control)

ALEKSEYEV, A.Ye.; BULGAKOV, K.V.; ZILITINKEVICH, S.I.; IVANOV, V.I.;
PETROV, I.I.; RYZHOV, P.I.; SYROMYATNIKOV, I.A.; TIMOFEYEV, V.A.;
SHCHEDRIN, N.N.; FATEYEV, A.V.

Sixtieth anniversary of the birth of Dmitrii Vasil'evich Vasil'ev.
Elektrichestvo no.3:93 Mr '62. (MIRA 15:2)
(Vasil'ev, Dmitrii Vasil'evich, 1901-)

VAVILOV, Aleksandr Aleksandrovich; SOLODOVNIKOV, Aleksey Ivanovich;
FATEYEV, A.V., red.; ZHITNIKOVA, O.S., tekhn. red.

[Experimental determination of the frequency characteristics
of automatic-control systems] Eksperimental'noe opredelenie
chastotnykh kharakteristik avtomaticheskikh sistem. Moskva,
Gosenergoizdat, 1963. 251 p. (MIRA 16:11)
(Automatic control)

VASIL'YEV, D.V.; MITROFANOV, B.A.; RABKIN, G.L.; SAMOKHVALOV,
G.N.; SEMENKOVICH, A.A.; FATEYEV, A.V.; CHICHERIN, N.I.;
NORNEVSKIY, B.I., kand. tekhn. nauk, retsenzent; BEREZIN,
S.Ya., nauchn. red.; SACHUK, N.A., red.; KRYAKOVA, D.M.,
tekhn. red.

[Calculation and design of servo systems] Proektirovanie i
raschet slediashchikh sistem. Leningrad, Izd-vo "Sudostroe-
nie," 1964. 606 p.
(MIRA 17:4)

3 33266-65

ACCESSION NR: AP5006632

S/0146/65/008/001/0026/0031

AUTHOR: Fateyev, A. V.; Oleynikov, V. A.; Zlatkin, V. I.; Likerman, D. I.

TITLE: Device for measuring the temperature of rotating bodies

22
21
B

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 1, 1965, 26-31

TOPIC TAGS: temperature measurement, gas turbine

ABSTRACT: A new device for measuring the temperature difference up to 300C (with a maximum absolute temperature of 700C) at two points of a disk (or a gas-turbine rotor) rotating at 5000 rpm is based on two thermocouples connected in opposition on a special inductive primary detector (see Fig. 1 of Enclosure). The latter comprises a permalloy stator carrying two windings connected in opposition and supplied at 50 cps and a salient-pole rotor carrying one winding connected to the thermocouples. The rotor is mechanically coupled to the rotating turbine shaft. Thus, the detector acts as a conventional torus magnetic amplifier but has a

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ACCESSION NR: AP5006632

0.3-mm airgap which prevents any amplification and actually is responsible for certain attenuation of the signal. Characteristics of the detector for various excitation currents and speeds (see Fig. 1) are practically flat. However, the thermocouple signal is very weak (about 12 mv or 2×10^{-10} w). Hence, the signal is fed to a special 7-transistor preamplifier supplied at 220 volts ac and consisting of a double-frequency modulator, a 3-stage amplifier proper, and a demodulator, all provided with a feedback loop. A laboratory model is reported to have shown a 3-4% error in temperature measurement. Orig. art. has: 4 figures. [03]

ASSOCIATION: Leningradskiy elektrotechnicheskiy institut im. V. I. Ul'yanova
(Lenina) (Leningrad Electrotechnical Institute)

SUBMITTED: 17Apr64

ENCL: 01

SUB CODE: PR

NO REF SOV: 002

OTHER: 001

ATD PRESS: 3207

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L 33266-65

ACCESSION NR: AP5006632

ENCLOSURE: 01

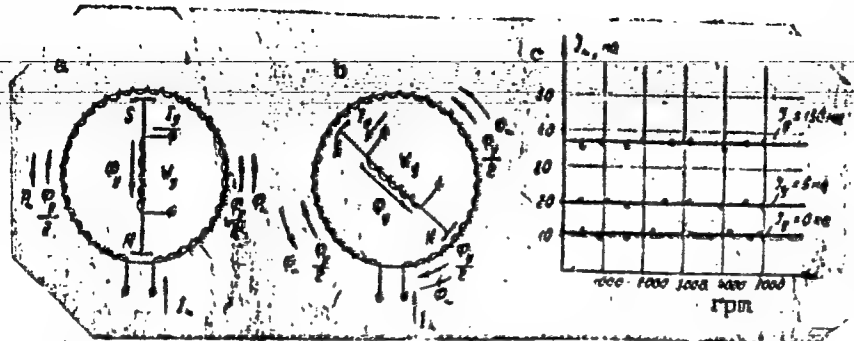


Fig. 1. A torus inductive detector

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FREYDZON, Isaak Rubinovich. Prinimali uchastiye: ARKHANCEL'SKIY, Ye.A.; BRENEV, V.F.; FATEYEV, A.V., doktor tekhn. nauk, retsenzent; TITOV, N.I., nauchn. red.; NIKITINA, M.I., red.

[Mathematical modeling of the automatic control systems of ships] Matematicheskoe modelirovanie sudovykh sistem avtomaticheskogo upravleniia. Leningrad, Sudostroenie, 1964. 423 p. (MIRA 18:2)

ATABEKOV, G.I.; BASHARIN, A.V.; BOGORODITSKIY, N.P.; BULGAKOV, K.V.;
VASIL'YEV, D.V.; YEGIAZAROV, I.V.; YERMOLIN, N.P.; KOSTENKO, M.F.;
MATKHANOV, P.N.; NOVASH, V.I.; NORNEVSKIY, B.I.; RUTSKIY, A.I.;
RYZHOV, P.I.; SOLOV'YEV, I.I.; SOLODNIKOV, G.S.; SLEPYAN, Ya.Yu.;
SMUROVA, N.V.; TINYAKOV, V.A.; PATEYEV, A.V.; FEDOSEYEV, A.M.;
SHABADASH, B.I.; SHCHEDFIN, N.N.

Viktor Ivanovich Ivanov, 1900-1964; obituary. Izv. vys. ucheb.
zav.; energ. 8 no.1:122-123 Ja '65.

(MIRA 18:2)

L 22569-66

ACC NR: AP6012962 SOURCE CODE: UR/0143/65/000/001/0122/0123

AUTHOR: Atabekov, G. I.; Basharin, A. V.; Bogoroditskiy, N. P.; Bulgakov, K. V.; Vasil'yev, D. V.; Yegiazarov, I. V.; Yermolin, N. P.; Kostenko, M. P.; Matkhanov, P. N.; Novash, V. I.; Nornevskiy, B. I.; Rutskiy, A. I.; Ryzhov, P. I.; Solov'yev, I. I.; Solodovnikov, G. S.; Slepyan, Ya. Yu.; Smurova, N. V.; Tinyakov, N. A.; Fateyev, A. V.; Fedoseyev, A. M.; Shabadash, B. I.; Shchedrin, N. N.

ORG: none

TITLE: Obituary for Ivanov, Viktor Ivanovich

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 1, 1965, 122-123

TOPIC TAGS: academic personnel, electronic personnel, electronics

ABSTRACT: Viktor Ivanovich Ivanov, Dr. of Tech. Sciences, professor of the Leningrad Electrotechnical Institute imeni V. I. Ulyanov, died 24 August 1964. He was born in 1900, was the first teacher of special relay protection of power equipment in the USSR, outlining the principles of the new discipline in a monograph published in 1932. In recent years, Ivanov has concentrated in the development of the teaching of industrial electronics and pulse technology in the Leningrad Institute. [JPRS]

SUB CODE: 09 / SUBM DATE: none

Card 1/1 *CK*

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L 11336-67 EWT(d)/EWT(m)/EWP(k)/EWP(h)/EWP(l)/EWP(v) FDM/DJ/WE
ACC NR: AP6030626 (A,N) SOURCE CODE: UR/0413/66/000/016/0122/0122

INVENTOR: Naydich, A. I.; Fateyev, B. V. 15

ORG: none

TITLE: Fuel supply regulator. Class 46, No. 185154

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 122

TOPIC TAGS: fuel control, fuel flow rate

ABSTRACT: This Author Certificate introduces a fuel supply regulator consisting of a housing with a cylindrical gate valve, which includes a rectangular metering dispenser and a bushing. In order to operate on various types of fuel without changing the metering element's profile, the bushing has several openings. each of which is adapted for two kinds of metering profiles which determine the consumption rate. Orig. art. has: 1 figure.

SUB CODE: 21, 13/ SUBM DATE: 29May64/

Card 1/1 *lma*

UDC: 621.438-543.3-531.9

FATNEV, D. I.

"Complex-Brigade Method for the Continuous Production of Residential Building Complexes." Cand Tech Sci, Khar'kov Construction Engineering Inst, Min Higher Education USSR, Khar'kov, 1955. (KL, No 10, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

FATEYEV, D.I., dots.

Basic statutes on organizing industrialized assembly-line
construction in rural districts. Trudy RISI no.4:49-61
'55. (MIRA 12:1)
(Rostov Province--Construction industry) (Farm buildings)

FATEYEV, D. S., Cand. Medic. Sci. (diss) "Experimental Observations of Stomach Secretions with Bronchio-lung Novocaine Blockage," Tomsk, 1961, 19 pp. (Omsk Med. Inst.) 250 copies (KL Supp 12-61, 289).

ZAKHARIKOV, N.A.; PIORO, L.S.; NOVIKOV, L.S.; FATEYEV, F.G.; MAZAYEVA, O.L.

Burning natural gas in glass furnaces. Trudy Inst. isp. gaza AN
URSN no.5:24-43 '58. (MIRA 11:12)
(Glass furnaces) (Gas as fuel) (Gas, Natural)

KOROBKO, M.I.; FATEYEV, F.G.

Multipoint automatic control of annealing tunnel furnaces. Stek. 1
ker. 15 no. 4:18-22 Ap '58. (MIRA 11:5)
(Glass furnaces) (Automatic control)

FATEYEV, F.G. [Faticiev, F.H.]

Experimental methods for lengthening the life of glass furnaces.
Leh.prom. no.3:55-57 JI-S '63. (MIRA 16:11)

1. Kiyevskiy steklovarennyy zavod.

PIVEN', Ye.N.; KOZAKEVICH, A.M.; BERNADSKIY, V.A.; FATEYEV, F.G.

New system for regulating furnace pressure. Stek.1 ker. 21 no.12:
23-24 D '64. (MIRA 18:3)

SAMOYLOV, D., kand. tekhn. nauk; FATEYEV, I., inzh.

Let's give better satisfaction to the requirements of passengers.
Zhil.-kom. khoz. 12 no.3:26-27 Mr '62.

(MIRA 15:10)

(City traffic)

PATEYEV, Ivan Nikolayevich; RABINOVICH, E.A., red.; SHIKHER, S.M., red.;
VORONIN, K.P., tekhn.red.

[Electric power; popular study] Elektroenergetika; populiarnyi
oчерk. Moskva, Gos.energ.isd-vo, 1960. 215 p. (MIRA 13:12)

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FATEYEV, K. Ya.

Fateyev, K. Ya. "On the further improvement of rabbit-raising on kolkhozes," Karakulevodstvo i zverovodstvo, 1949, No. 2, p. 48-51.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

БАСИЯ, В. Я.

Breeding rabbits for fur on collective farms. 1st. ed., 1st. ed. Moscow, Soc. Sci.-vs
sel'khoz. lit-ry, 1954. 95 p. (54-43479)

CFX53.F34 1954

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Zool. zhur. 39 no.8:1236-1238 Ag '60. (MIRA 13:8)

1. Department of Zoology, Kostroma State Pedagogical Institute.
(Kostroma Province--Fur-bearing animals)
(Udmurt A.S.S.R.--Fur-bearing animals)

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Variability of internal organs in the silver fox (*Vulpes fulvus*
Decm.). Zool.zhur. no.7:1090-1098 J1 '61. (MIRA 14:7)

1. Department of Zoology, State Pedagogical Institute of Kostroma.
(Silver fox) (Viscera)

FATEYEV, K.Ya.

Morpho-biological changes in rabbits induced by different environmental conditions. Zhur. ob. biol. 22 no.5:388-391 S-0 '61.
(MIRA 14:9)

1. Kafedra zoologii Kostomskogo gosudarstvennogo pedagogicheskogo instituta.
(RABBITS) (ZOOLOGY—VARIATION)

FATEYEV, K.Ya.

Variability of internal organs in the common European mole
(*Talpa europaea*). Zool.zhur. 41 no.11:1700-1705 N '62.
(MIRA 16:1)

1. Zoological Department, State Pedagogical Institute of
Kostroma.

(Moles (Animals)) (Viscera)

BORISOV, A.M.; MERZHVINSKAYA, Ye.P.; FATEYEV, M.N.

Types of loaders of continuous action for agriculture. Trakt.
i sel'khoz mash. 33 no.6:35-38 Je '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyayst-
vennogo mashinostroyeniya.

(Loading and unloading)
(Agricultural machinery)

FATEYEV, M.N., inzh.

Aerodynamic characteristics of the ground bulk of corn and sunflower.
Trudy VISKHOMa no.41:16-32 '63. (MIRA 17:9)

LIPOV, Yu.N.; FATEYEV, M.N.

Regulator for a pneumatic blower-conveyor. *Biul.tekh.-ekol.inform.*
Gos.nauch.-issl.inst.nauch.i tekhn.inform. no.9:70-72 '63.
(MIRA 16:10)

FATEYEV, M.M., inzh.

T P-30 pneumatic conveyor. Trakt.1 sel'khozmasb. 31 no.8:42-43
Ag '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystven-
nogo mashinostroyeniya.
(Pneumatic-tube transportation)

FATEYEV, M.N., inzh.

Theory of pneumatic conveying. Trudy VISKHOMa no. 44:17-32
'64. (MIRA 18:11)

LIFOV, Yu.N., ALUYEV, M.N.

Rotary feeder for a continuous action loader. Trakt. i sel'khoz mash.
no.4:40 Ap '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystven-
nogo mashinostroyeniya.

KHAKHALIN, Viktor Stepanovich; STERNZAT, M.S., redaktor; PATEYEV, N.P.,
redaktor; YASNOGORODSKAYA, M.M., redaktor; FLAUM, M.Ya., tekhnicheskij redaktor.

[Radiosondes] Radiosondy. Leningrad, Gidrometeorelogicheskoe izd-
vo, 1955. 74 p. (MIRA 9:6)
(Radiosondes)

HAIRYEV, N.F.

PHASE I BOOK EXPLOITATION

SOV/1732

Leningrad, Glavnaya geofizicheskaya observatoriya

Metodika meteorologicheskikh nablyudeniy (Methodology of Meteorological Observations) Leningrad, Gidrometsizdat, 1956. 153 p. (Series: Itz: Trudy, vyp. 61 /183/ 1,400 copies printed.

Sponsoring Agency: USSR, Glavnoye upravleniye gidrometeorologicheskoy sluzhby

Ed. (title page): E.I. Pivovareva, Candidate of Geographical Sciences; Ed. (inside book): Ye. I. Oksanova; Tech. Ed.: E.P. Shumikhin.

PURPOSE: This collection of articles is intended for meteorologists serving with the hydrometeorological network in the Soviet Union.

COVERAGE: The publication contains scientific articles on the methods of meteorologic observations and on the procedure of testing meteorological instruments. The possibility of reducing the errors and thus securing more accurate results in observations are shown by mathematical computations and graphs. The need for a universal portable instrument that would be capable of instantly recording cloud height is emphasized. The articles are accompanied by maps, diagrams, tables and references.

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FATEYEV, N. P.

91-142 551.508.762:551.576.4
 Fateev, N. P., K metodike opredeleniya vysoty nizhnay granitsy oblakov. [Methods for determining cloud base height.] Leningrad. Glavnaia Geofizicheskaya Observatoriya. Trudy. 50: 121-127, 1956. 3 figs., 11 refs. DWH In view of the lack in the U.S.S.R. and abroad of a simple and reliable device for a quick determination of cloud base heights, the author reviews the practical schemes, developed recently in the U.S.S.R. and abroad, which could be used as a basis for the creation of such photometric apparatuses for the use of stations of the U.S.S.R. hydrometeorological network. Subject Heading: 1. Cloud base height indicators.—A.M.P.

Card 1/1

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